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November 2, 1979

Ms. Randy Rogers H. U. D. 1111 North Shore Drive Knoxville, Tennessee 37919

Res Silver Springs Well Contamination Rutherford County, Tennessee

Dear Ms. Rogers:

During late 1978 and possibly into early 1979, a piece of property in Rutherford County was used for a chemical dump. The site is located off of Wade-Herrod Road, south of Smyrna, Tennessee. As a result of a well survey begun in March 1979, and continuing to the present, a number of contaminated wells and springs have been located. The chemicals found in these contaminated water supplies are the same as those found at the dump site.

A geological survey by this Division in cooperation with Dr. Burton Bordine of MTSU's Department of Geology and Earth Sciences concluded that the well contamination resulted from the illegal dumping. Rock fracture bearings taken at the dump site indicate that flow of runoff from the area would travel primarily in northeast and southeast directions – the same direction as most of the contaminated wells. Surface contours also indicate flow in an easterly direction. A survey of the area found no other possible sources of the contamination.

The chemicals involved are generally called chlorinated hydrocarbons and are considered to be dangerous for human consumption and exposure. The Health Department has therefore advised owners of the contaminated wells not to use the water. It is believed that over time, the contamination will gradually be eliminated through dilution by rain water and evaporation. It appears, however, that such natural elimination may take a long period of time, perhaps years. Chemicals are presumably trapped in rock fractures and pockets, and will not be easily flushed out.

From available information, this Division has determined this situation to be an eminent threat to the families involved. We recommend that Consolidated Utility District water be made available to the residents as a permanent solution. If any further information is needed, please feel free to contact me.

DRA NOV

Sincerely,

Barry W. Suikin Water Quality Specialist Division of Water Quality Control

BWS/dj 5-6

cc: Jim Scarbrough, EPA, Atlanta